

## Title (en)

Control circuit for a high current switch having an isolated gate and impulse switch using such a circuit

## Title (de)

Ansteuereinrichtung eines Hochstromschalters mit isoliertem Gate und Impulsschalter unter Verwendung derselben

## Title (fr)

Dispositif de commande d'un commutateur à grille isolée, de fort courant, et commutateur d'impulsions comportant un tel dispositif

## Publication

**EP 0716507 A1 19960612 (FR)**

## Application

**EP 95402735 A 19951205**

## Priority

FR 9414704 A 19941207

## Abstract (en)

The control device includes a current conduction circuit (36) which has a switch (38) for connection in series to a reverse biased diode (42) and then to a load (8). A parallel connection (12) is provided to a pulse switch (2). The diode allows conduction when the voltage is smaller than that on the drain (22) of the transistor switch. The source being connected to earth. A discharge circuit (40) is placed between the FET switch terminals (22,14) to perform discharge control. A voltage limiter (39) limits the voltage on the drain.

## Abstract (fr)

La présente invention concerne un dispositif de commande d'un commutateur d'impulsions (2) à grille isolée de fort courant dans un circuit de charge (6). Selon l'invention, le dispositif comporte des moyens de mise en conduction (36) avec un circuit de commande pour dériver du circuit de charge (6) un courant de mise en conduction du commutateur (2). Application à la réalisation d'interrupteurs à fort courant et à haute tension.  
<IMAGE>

## IPC 1-7

**H03K 17/042**; **H03K 17/081**; **H03K 3/57**; **H02M 1/088**

## IPC 8 full level

**H03K 3/57** (2006.01); **H03K 17/042** (2006.01); **H03K 17/0812** (2006.01); **H03K 17/082** (2006.01)

## CPC (source: EP)

**H03K 3/57** (2013.01); **H03K 17/04206** (2013.01); **H03K 17/08122** (2013.01); **H03K 17/0822** (2013.01)

## Citation (search report)

- [YA] GB 2164513 A 19860319 - MARCONI CO LTD
- [A] EP 0431846 A2 19910612 - MITSUBISHI ELECTRIC CORP [JP]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 015, no. 359 (E - 1110) 11 September 1991 (1991-09-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 16, no. 403 (E - 1254) 26 August 1992 (1992-08-26)
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 135 (E - 1052) 4 April 1991 (1991-04-04)
- [A] PATENT ABSTRACTS OF JAPAN vol. 16, no. 22 (E - 1156) 20 January 1992 (1992-01-20)
- [A] R. J. BAKER ET AL.: "A 500 V nanosecond pulse generator using cascode-connected power MOSFETS", MEASUREMENT SCIENCE & TECHNOLOGY, vol. 3, no. 8, BRISTOL, GB, pages 775 - 777, XP000306526, DOI: doi:10.1088/0957-0233/3/8/014

## Cited by

FR2839828A1; FR2821215A1; EP0887929A1; FR2765049A1

## Designated contracting state (EPC)

CH DE FR GB IT LI

## DOCDB simple family (publication)

**EP 0716507 A1 19960612**; **EP 0716507 B1 20051012**; DE 69534510 D1 20060223; DE 69534510 T2 20060720; FR 2728121 A1 19960614; FR 2728121 B1 19970131

## DOCDB simple family (application)

**EP 95402735 A 19951205**; DE 69534510 T 19951205; FR 9414704 A 19941207